



**NEWSLETTER OF THE LONDON CHAPTER
ONTARIO ARCHAEOLOGICAL SOCIETY**

*c/o Museum of Ontario Archaeology
1600 Attawandaron Road, London, ON N6G 3M6*



October, November & December 2018

18-06, 18-07 & 18-08

Please see inside (page 1) for the latest London Chapter news.

We hope everyone is well.

PLEASE KEEP SAFE!

Speaker's Night is held the 2nd Thursday of each month (January to April and September to December) at the Museum of Ontario Archaeology, 1600 Attawandaron Road, near the corner of Wonderland & Fanshawe Park Road, in the northwest part of the city. The meeting starts at 7:30 pm. Doors open at 7:00 PM and as usual there will be free juice and cookies!

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ANNUAL RATES

Student	\$15.00
Individual	\$18.00
Institutional	\$21.00
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In these trying times of the coronavirus we hope everyone is keeping safe. We have naturally had to **cancel our planned April 9th meeting of the London Chapter** with **Dr. Heather Hatch** and of course, our meeting venue, the *Museum of Ontario Archaeology* itself, is closed too! As that is the last formal meeting before the summer break, Dr. Hatch will now do her presentation on recent developments at the Museum at one of our fall meetings. **Chris Dalton** a longtime chapter member has also agreed to talk in the Fall about some archaeological work he was involved in in Labrador. We will update you on the exact speaker schedule as soon as we can. Thank you for your patience and understanding. We look forward to our speaker/meeting nights beginning again in the fall on **Thursday, September 10th**, and will update our website with the exact schedule and speakers as soon as they are known.

In the meantime, our next scheduled gathering is our always much anticipated summer picnic held in conjunction with the annual “**Artifact Identification Day**” at **Longwoods Conservation Area**, 8348 Longwoods Road, Mount Brydges, scheduled this year to be held **Sunday, July 12th**. People usually begin gathering around 11:30 and the chapter provides hot dogs, sausages and some snacks for all attendees but donations are always welcome. The Artifact IDS begin at 1 PM and go to 4 PM and Chris Ellis and other volunteers will be on hand as usual to identify as best they can artifacts brought in by members of the general public. If like past years we will get a large turnout and they have kept the identification folks busy – last year they had to go beyond the 4 PM deadline to accommodate all who showed up. As always, you can also try your hand at flint-knapping with the usual knapping crew and throwing darts with the spear-throwers at the fake deer. London OAS members get in for free so do not pay at the machine at the gate but when you arrive get a parking pass from Karen Mattila to display in your vehicle on the parking lot adjacent to the picnic area.

As announced at our last regular meeting in March, we are also again this year partnering with the *Kettle Creek Conservation Authority* in holding an **Archaeology Day** at the **Lake Whitaker Conservation Area**, 5840 Whittaker Lane, Harrietsville, Ontario, N0L 1B0 on **Saturday, August 15th**. This event is a follow-up to our very successful event at that venue last year, as was described at our February meeting by London Chapter stalwart Darryl Dann. Darryl has again agreed to take on the organizing role, for which he deserves our most hearty thanks! It will be organized the same as last year with simulated digs for the kids, artifact id's with Chris Ellis, flint-knapping with stalwart Darcy Fallon and assistance from our partners at the Conservation Area, *Museum of Ontario Archaeology* and the main body of the OAS. **Please contact Darryl directly** (darryl.dann@sympatico.ca) if you want to help out with any of the various activities!

Finally, Chris Ellis has once again come forward with a contribution for the *Kewa* to finish off our 2018 (?!>+?!>!) issues. We are sending this out to our electronic subscribers only for now -- those who prefer paper versions will have to wait for receipt until we have it printed and sent out after the current crisis subsides. However, if like Chris you have some self-isolated time on your hands, you may think of putting this good time to use polishing up that CRM or other report for *Kewa* and maybe, just maybe, we can reduce the 1½ year backlog of issues we need to release!

Archaic Research, the Black Hole of Southern Ontario Archaeology¹

Christopher Ellis

“...one of the major problems facing Archaic period studies (is) the domination of theorizing and paucity of data” (Emerson and McElrath 2009:23)

In this paper I attempt to do a short update of our knowledge of the southern Ontario Archaic since the publication of Ellis et al. (1990a). Since the Archaic is a development that lasted for some 8500 calendar years, from ca. 11,500 to 3000 years ago, this may seem like an impossible task. However, it is made easier by the fact I more recently was involved in doing a lengthy southern Ontario Archaic synthesis (Ellis et al. 2009), many details of which I do not need to repeat here. Yet, it is also not as difficult as it seems to do a review of such a massive slice of time. We have, at least proportionally in comparison to other pre-contact eras, not found out much in the last 30 years.

The problem of finding out about Archaic peoples is not new, nor is it confined to Ontario as the introductory quote above from the massive 2009 Archaic synthesis of all of mid-continental North America above makes clear. Indeed, the neglect of the Archaic is long-standing and was recognized even when the *Archaeology of Southern Ontario* volume (hereafter ASO) was released. An example is this quote from a book review of the volume in *American Antiquity*:

Thus, the vast Archaic period spans 60 percent of southern Ontario (*in time*) but only 13 percent of ASO. Late pre-historic Iroquoian Cultures occupy 8 *percent (in time)* but two-thirds of the book (Shott 1993; italicized text added by me for clarity).

There are, of course, a whole host of reasons why we know so little, and continue to know relatively little, about the Archaic (enumerated in more detail in Ellis et al. 2009:790-791, 2014a:3-7). Some of these are very practical or pragmatic reasons. Among the most obvious are the fact these sites are old and have less preservation and that Archaic peoples had lower populations and tended to live in less substantial and smaller communities – Archaic sites as a whole are often stereotyped as small and ephemeral. However, I do not hesitate to add that one would expect that the same problem to effect Paleo research and yet, we have learned a considerable amount since ASO about the people living in that even earlier and shorter time frame. This gap suggests other factors are even more important in restricting our Archaic knowledge versus earlier Paleo times. I can think of several of reasons, one being that Paleo sites are seen as rarer and more mysterious (archaeologists, for better or for worse, have long been fixated on “firsts” and finding the oldest sites) but there are other things that confound Archaic studies versus Paleo ones.

¹¹ This paper was originally presented in the symposium “The Archaeology of Southern Ontario to A.D. 1650 (edited by Ellis and Ferris), A 25+ Year Retrospective”, at the invitation of organizer Dr. Gary Warrick, Wilfred Laurier University, at the 43rd Annual Meeting, Ontario Archaeological Society, Waterloo, Ontario, November, 2016. I have updated the presentation with some more recent published references and expanded some sections for clarity but otherwise have left the discussions intact.

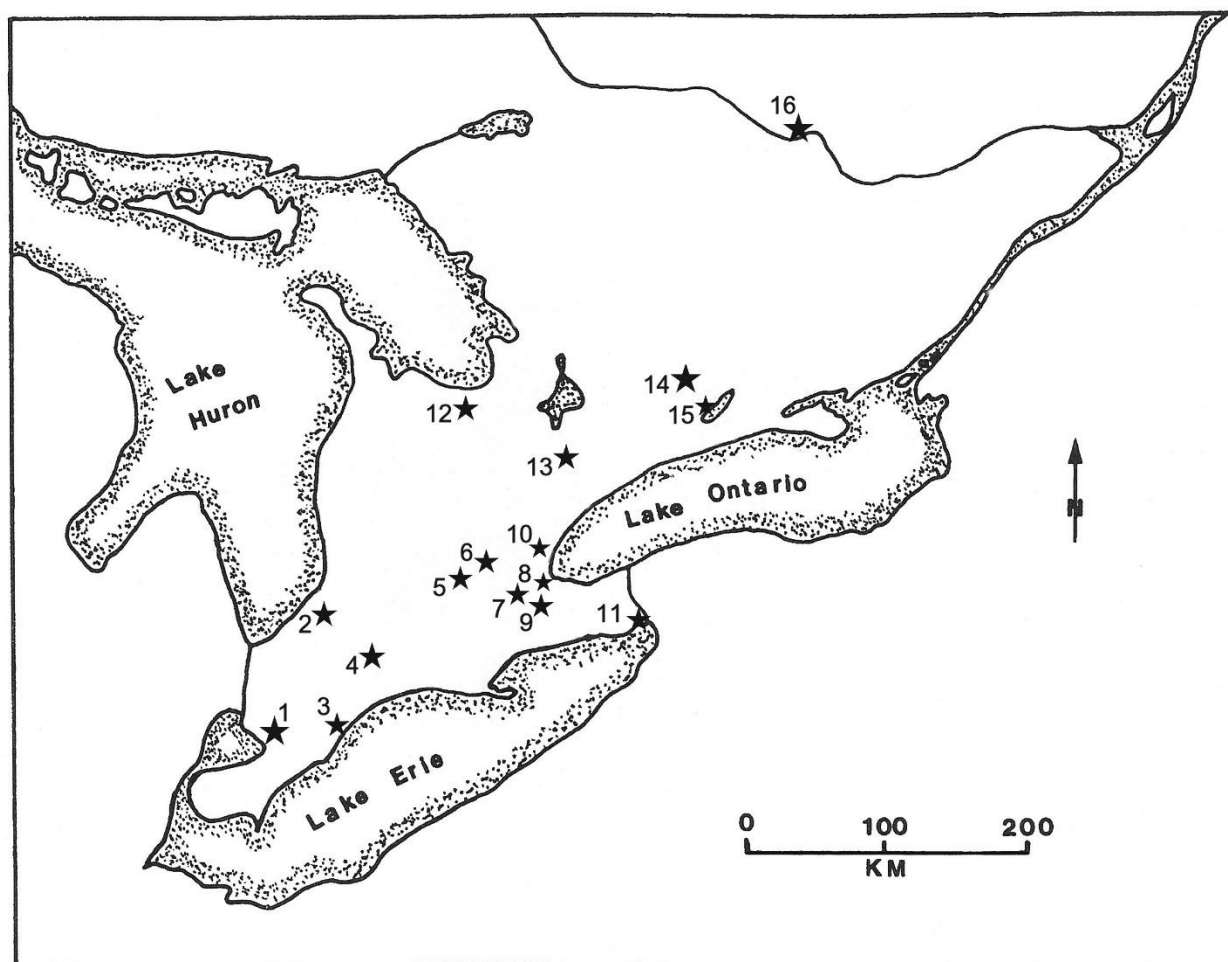


Figure 1: Location of some Archaic Sites Mentioned in the Text. 1: Crawford Knoll; 2: Davidson and Adder Orchard; 3: Nettling; 4: Welke-Tonkonoh; 5: Blue Dart; 6: Winter; 7: Leschuk-Weisz and Farrugie; 8: Thistle Hill; 9: Laphroaig; 10: Northoway 2; 11: Peace Bridge; 12: Rentner; 13: Mt. Albert; 14: Jacob Island; 15: McIntyre; 16: Allumette and Morrison's Island.

One reason is that, with some notable exceptions, the usually preserved stone tool kits beyond weapon tips or points is relatively non-descript on Archaic sites, particularly after about 8000 BC, making them hard to identify and date. This feature contrasts with Paleo peoples who made a very wide range of elaborate and distinctive, highly retouched flake tools. (Of course, unlike Woodland era peoples, Archaic peoples did not make pottery!). Archaic sites are mainly simple lithic scatters and hard to interpret or recognize for what they are, a problem exacerbated by the fact the few more commonly recovered diagnostic items on these sites, the stone point tips, have long been a target of relic collectors (see Shott 2017, 2018:3). Many unassignable lithic scatters could have been identified as Archaic ones if they had not been subject to unrecorded or poorly documented surface collections. Also, Paleo peoples, unlike Archaic ones, often used exotic/distant stone raw materials, which helps to initially recognize sites. Archaic groups used more local sources no different than later descendants so again it is harder to recognize such sites and separate out materials from other occupations on multi-component sites.

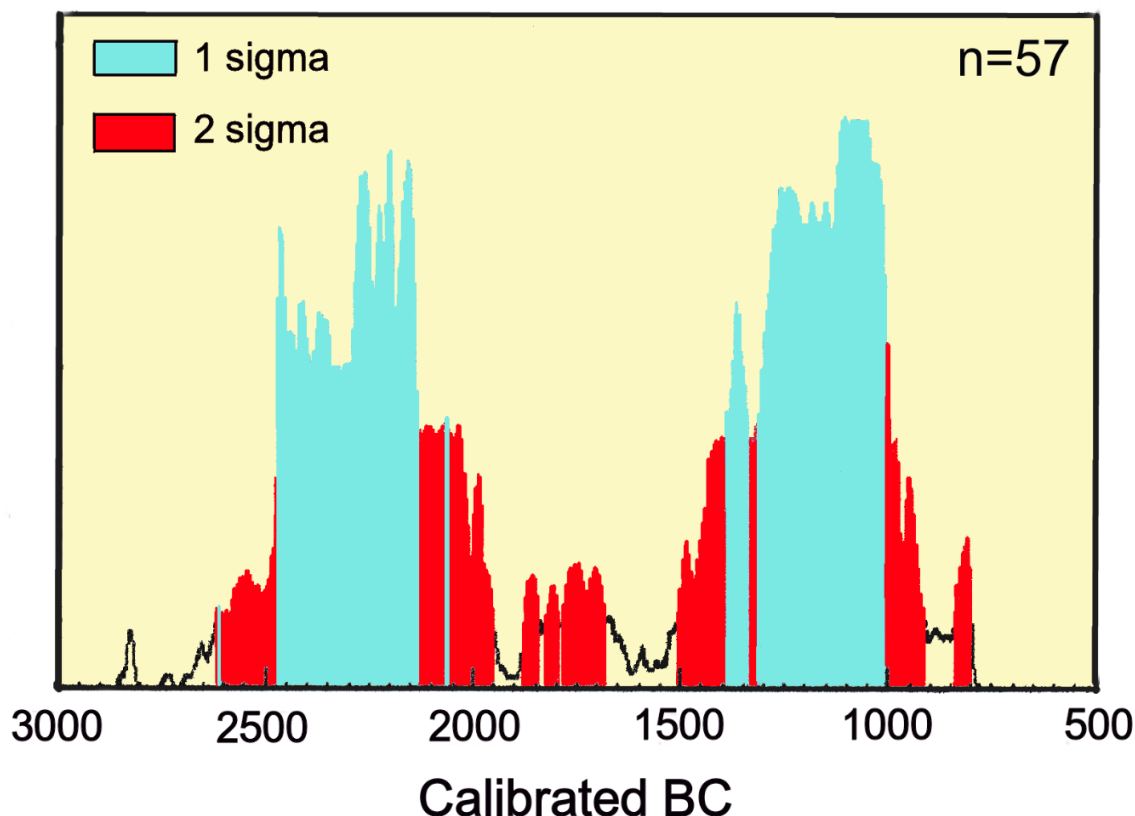


Figure 2: Summed Probability Distribution of All Davidson Site Radiocarbon Dates. Calibrated and produced using Calib Version 7.0.4.

Second, we also have to cope with the problem, especially in the Early to Middle Archaic prior to 4300 BC, that much of the archaeological record, notably the lakeshores that were magnets for human occupation, were mainly lower than today so are under modern waters. To make matters worse, climates were very dry in the time period after about 7000 BC down to about 4500 BC (see below). This shift, and the resulting somewhat sterile environments, may have severely constrained overall populations, resulting in sites being correspondingly very rare.

Finally, yet another practical problem is that in later Archaic times, after about 3000 BC, climates were quite stable compared to earlier times. The result is the same locations were attractive for occupation over time and the result is sites occupied over and over and over again extending even into the earliest Woodland. It is very hard to sort out the different occupations on such sites as they can be very mixed up and severely limit interpretations. An excellent example of this problem is my recent work at the Late Archaic Davidson site near Lake Huron (Figure 1) that has many well-preserved Archaic features (Ellis et al. 2014a, 2014b).

The Davidson site location was actually unavailable for occupation prior to 2700 BC or so due to inundation by high waters in the Huron basin. There are two main components at this site of the Broad Point and Small Point Archaic (see Ellis et al. 1990a, 2009) as well as rare traces of

subsequent Woodland era use. Overall, the 57 radiocarbon dates obtained to date (one conventional date and 56 AMS dates) sort mainly into two distinct groups, one around 2500-2000 BC (ca. 3800 radiocarbon years ago; hereafter RCYBP), and one around 1500-1000 BC (ca. 3000 RCYBP), that not surprisingly correspond respectively to the generally accepted ages of the Broad Point and Small Point Archaic (Figure 2). However, when individual dates are plotted by features they do not sort out as nicely, as shown in an example of a 4 by 4 m excavation block (Block Unit A) and a small, adjacent extension on the east centre (Figure 3). There are many spatial groups of pit features of about the same size and shape as shown by four different shadings on Figure 3. While there may be contrasts between these pit clusters, the size/shape correlation suggests the features within each separate cluster mainly represent an “integration of events” (Holdaway and Wandsnider 2006; Wandsnider 2008:62). In sum, I suspect, as do others for comparable feature clusters on other sites (e.g., Bettarel and Smith 1973:15-19; Binford et al. 1970:61-66), that each represents a group of features used by the same people for the same purpose about the same time – the individuals using such clusters probably directly knew, or knew of, each other as individuals.

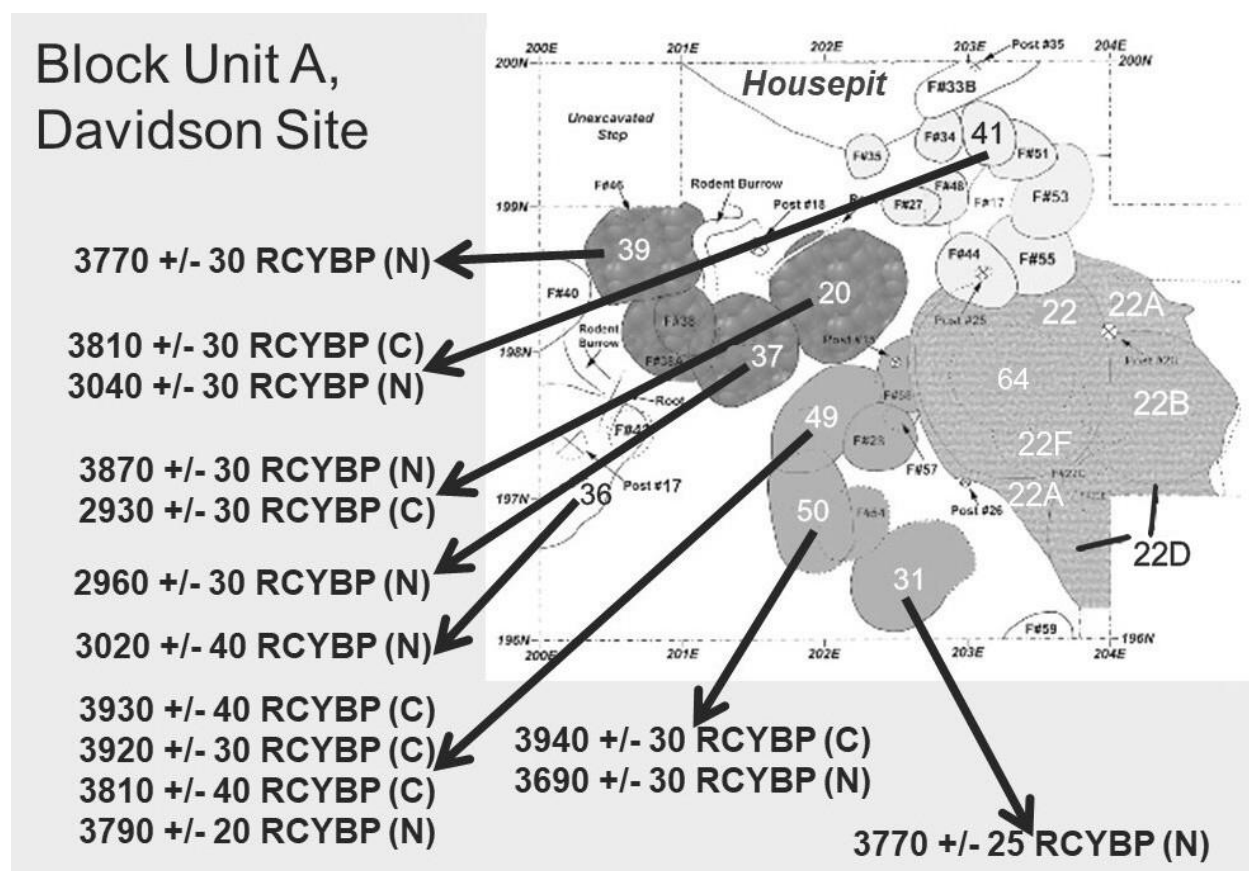
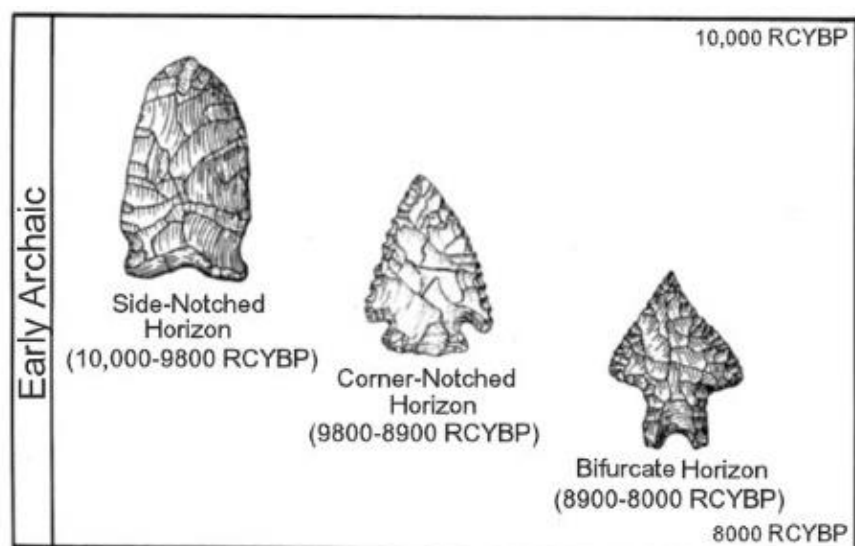


Figure 3: Excavation Block A (4 by 4 metres), and Small Excavation Extension to East, Showing Features, Feature Clusters (Different Shades). Associated dates for three of the clusters are shown in Radiocarbon Years. N=nutshell date; C=charcoal date.

For the earliest component at the site, namely Broad Point features, the pit cluster dates are about the same or ca. 3800 RCYBP as in the Feature #31/49/etc. pit cluster at lower centre on Figure 3. The exception is, as expected, that charcoal dates (C) from longer lived trees *per se* tend to date earlier than their short-lived nutshell (N); the latter is often seen as a more accurate indicator of the features' ages. However, consistent dates are not produced for the later Small Point features at the site. Notable here are Features #20 and #41 highlighted on Figure 3, which yielded different dates up to 1000 years apart. They are actually Small Point Archaic pits but they have been dug down into older features and incorporated older Broad Point charcoal or nutshell. The contents are all mixed up and cannot tell us much about Small Point use of the site. It is not surprising such feature contents are commingled. You actually have at the north end of the pictured excavation unit the south edge of a large, one metre deep, Small Point Archaic housepit (Feature #52; see below and Ellis et al. 2015:33-43). Digging of this house went through pre-existing Broad Point features, including a midden. The material from digging the pit was thrown around the edge of the excavation – a “rim area deposit” as is typical of simple earthen pit houses (see Hayden 1997: Figure 3.8, 2000: Figure 2). In turn, a series of other pits such as Feature #41 were dug through the house debris including the rim area deposits mixing it up even more! Also, some of those pits dug through the area of the house rim deposits (Features #41/etc.; see Figure 3 at top right shaded in light grey) are part of a group/cluster of smaller pits of a very similar shape. These similarities suggest they may have had the same function and were dug close to each other in time. It could be that only one or two actually were in use at any one time. The users may have dug one of these smaller pit, then dug another and in doing so filled the already existing, convenient, adjacent abandoned pit with the fill removed to dig the new pit. In such a case the series of smaller pits may represent a “conveyor belt” in and of themselves, where already mixed up material from earlier occupations was sequentially moved from one pit to another within the pit cluster itself.

In any case, the multi-component nature of many Archaic sites can really confound interpretations and limit insights. Overall, my experience at Davidson means I personally would not completely trust the dates on any particular feature from any unstratified Archaic site, and those of the subsequent Early and Middle Woodland, unless multiple dates have been run on the feature using short-lived materials. For that matter, for some Davidson features the charcoal dates for certain features fall in the Broad Point range whereas the nutshell dates fell in the Small Point range. I suspect this contrast is due to shifting use of the site over time and differing rates of deposition of these two materials. Just dating the nutshell might provide a more precise date but unless both materials were used, commingled features might not be recognized!² Having said that, the availability of AMS dating for tiny samples obviously gives me some optimism. In the past, having to rely on conventional dating that required large samples, we had less than 20, and almost all imprecise and on charcoal, radiocarbon dates from Archaic sites in all of southwestern Ontario. At Davidson, one could literally obtain hundreds of AMS dates from the botanical remains recovered.

² This is one reason why some charcoal flecks, which are less precise indicators of age, were dated at Davidson.



◀ **Figure 4:** Early Archaic Point Type “Horizon Sequence” as Suggested in ASO. Redrawn after Ellis et al. 1990a: Figure 4.3. Drawings by Chris Ellis and Ian Kenyon.

So there are many practical problems in documenting and understanding Archaic sites, but there are other problems as well that have led to their neglect.

Certainly in the past these Archaic cultures have been seen as simple and easy to understand so have been of less theoretical interest to academic archaeologists who want to focus on the “big” questions such as the origins of agriculture or a sedentary life or the growth of larger communities. I find this especially problematic in several ways; not only has recent research shown these societies are much more complex than the old stereotypes of them would have us believe (see Emerson and McElrath 2009; Sassaman 2009), but the main people who are going to focus attention on such wider academic/theoretical questions are research archaeologists as opposed to the vast majority of CRM practitioners. Yet, most practicing academics based in Ontario ignore these sites in their own research programs! Until James Conolly of Trent University more recently started working on such sites in the Trent-Severn area, I was the only practicing academic based southern Ontario archaeologist in recent times who seemed to find them of a more primary interest.³

Regardless, despite the problems of finding out about Archaic peoples, there have been some good insights since ASO and I want to look at a few of these in the rest of my presentation beginning with the Early Archaic of some 9500-7000 BC (10,000-8000 RCYBP)

Early Archaic

In ASO the Early Archaic was subdivided into three horizons based on variation in stone point form (Side-Notched, Corner-Notched and Bifurcate based) and estimates of the age of each were based on comparison to well-dated sites to the south of us as we had no radiocarbon dates (Figure 4). Since ASO we at least have one Ontario date on the Bifurcate Horizon from the very small

³ Of course, subsequent to giving this paper I am now retired and while I continue to work of papers/reports I have ceased designing and doing actual fieldwork projects.

Blue Dart Site near Kitchener, Ontario (Figure 1) of ca. 8300 RCYBP (Lennox 1993) or ca. 7300 BC in calendar years— exactly as guesstimated in ASO.

While there have been a few reports on side-notched (notably Hi-Lo variants)⁴ and bifurcate sites such as Blue Dart, most work since ASO has related to the Corner-Notched or Kirk Horizon (Tuck 1974). A major Ontario site, unpublished in any detail at the time of ASO, is the Nettling Site near Lake Erie (Figure 1) for which we now have some more detailed published accounts (Ellis et al. 1991; McMillan 2003). I note that some have questioned that Nettling is Early Archaic, arguing that corner-notched serrated points do occur in later, early Middle Archaic time frames (e.g., Seeman et al. 2020:127). For that matter, serrated points can occur in the Late Archaic. Although there are exceptions, and as I discuss more later, here is a major problem: we rely heavily on styles/typologies to date sites as in much of the Archaic they are the only consistent potential diagnostic. Unfortunately, however, our point typologies are very poorly developed and largely impressionistic.

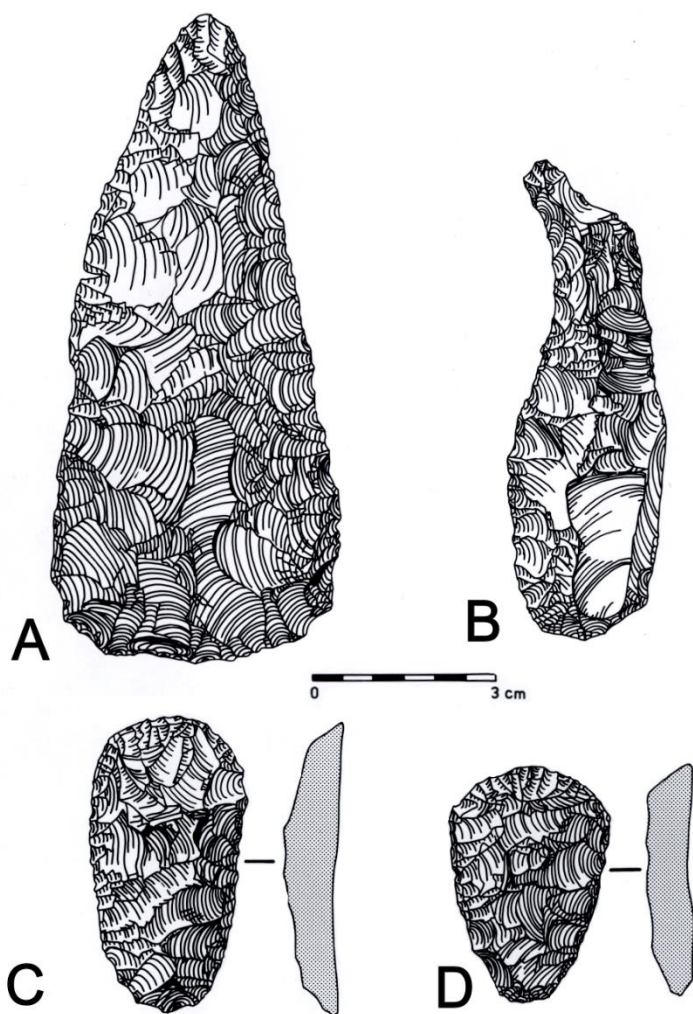
Having said that, there is no doubt in my mind that the Nettling site is Early Archaic in age. As we strongly stressed in ASO and elsewhere when talking about this site (e.g. Ellis et al. 1991:23-24, 2009:797-798), an Early Archaic assignment is clear not based on the points per se or alone but instead on the fact the distinctive associated stone tool kits beyond the points are identical to sites as far south as Georgia. Unlike the rest of the Archaic, and a characteristic that clearly indicates continuity from earlier Paleo industries, in the times prior to 8900 RCYBP (calibrated ca. 8000 BC) there are many other stone tools that are diagnostic and occur on these sites such as large trianguloid bifaces with one more refined, straighter, side cutting edge (Figure 5a), concave side scrapers that have a stem shaped for hafting (Figure 5b) and, on coarser grained rocks, ovate chopper scrapers and chipped celts with ground bits. The end scrapers, which often have fine, all-over retouch in their backs (Figure 5c-d), are another example and an excellent analysis comparing these tools with earlier Paleo forms was carried out by Katherine McMillan (2003). In fieldwork it has even been possible to initially recognize these sites based on finding these end scrapers (e.g. Ellis and Deller 1991). There have been reports generated on what are apparently⁵ numerous other small Corner-Notched Horizon sites found largely through CRM work. A notable example is Jeff Bursey's (2008, 2012) work on several sites near the west end of Lake Ontario on which he was able to provide detailed technological descriptions and insights into stone tool manufacture.

Middle Archaic

Turning to the subsequent Middle Archaic, it is the earliest part of this time frame, prior to ca. 4300 BC (>5500 RCYBP) that is the real black hole of Ontario Archaeology. There are stone points recovered that I am sure date early in this time period prior to ca. 6000 BC or about 7000

⁴ Hi-Lo as a whole (e.g., beyond simply side-notched varieties) can be regarded as Late Paleo or Early Archaic or both (Ellis 2004). See Ellis (2017) for a more detailed summary of more recent research on Hi-Lo since ASO was published.

⁵ In the absence of any of the many other diagnostic items, I caution again that from a solely artifact perspective corner-notched serrated points alone are not necessarily enough to confirm an Early Archaic component on a site.

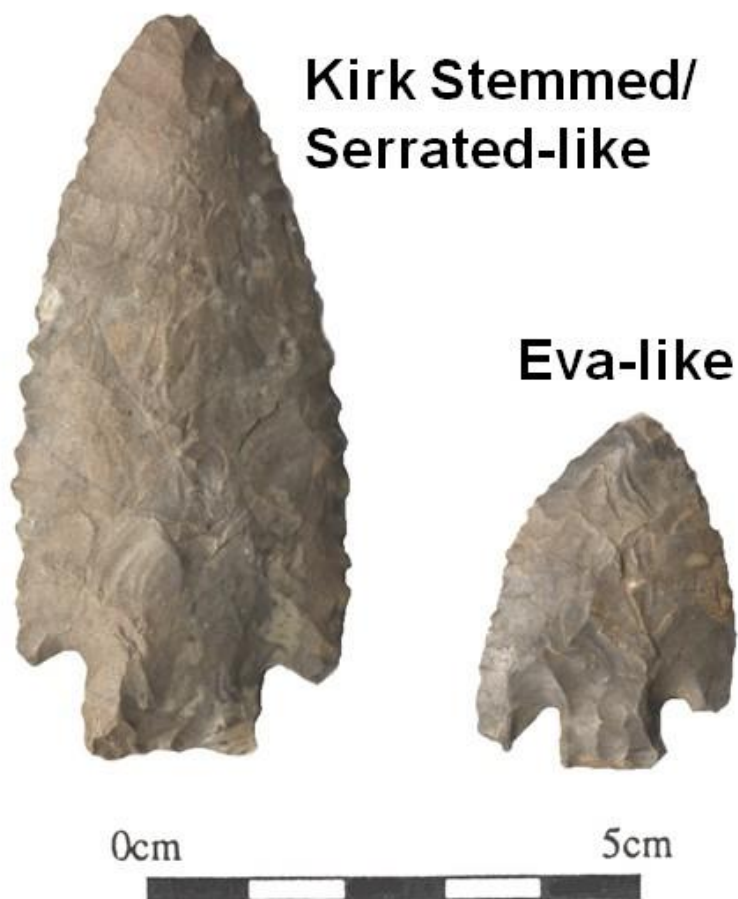


◀ **Figure 5:** Some Examples of Distinctive Early Archaic (Corner-Notched Horizon) Flaked Stone Tools, Nettling Site. A: Large Trianguloid Biface; B: Hafted Concave Side Scraper; C-D: End Scrapers with all-over dorsal flaking. Drawings by Janie Ravenhurst.

RCYBP. This age assignment is based on finds that resemble types found to the south and east of Ontario such as Kirk Stemmed, Eva and Stanley-Neville-like points (Figures 6 & 7; Borland and Poulton 1997:12; Ellis 1997; Wright 1978: Plate 1, 13-18, 24). Some Ontario sites, notably with Stanley-Neville-like points, have been found and excavated such as Leschuk-Weisz and Farrugie (see Ellis et al. 2009:804-805), Northway 2 (Fisher et al. 1997) and probably Laphroaig⁶ (Woodley 1996), all in southcentral Ontario (Figure 1). These sites document a much simplified overall

stone tool kit. Nonetheless, these sites are still exceptionally rare and I believe even rarer than Early Archaic sites. Part of the reason for the rarity of such sites is the lowered water levels in the Great Lakes basins of the time so many prime lakeside site locations are now underwater (Figure 8A). Yet, this cannot be the only reasons as the levels were lower in earlier times as well. As hinted earlier, it is also possible that climatic conditions at this time also restricted populations as until around 7000 RCYBP conditions were quite dry, so much so that the waters in the modern Huron basin lakes of the time reached their lowest levels in Lakes Stanley and Hough, only drained internally and were somewhat brackish (e.g., McCarthy et al. 2012). I note that several assemblages of this time I am aware of are almost completely heat-damaged after deposition such as Leschuk-Weisz and Farrugie. I wonder if this reflects the drier conditions and more frequent forest and other surface fires of the time when these assemblages were more likely to be fully exposed on the ground surface – it is an idea worth investigating anyways. Regardless, the real black hole, where little is known, is between ca. 6300 and 4400 BC (7500-5500 RCYBP) or after

⁶ The stemmed bifurcate based forms of the late Early Archaic tend to grade together with the subsequent early Middle Archaic stemmed, concave base forms so it is often difficult to accurately type points into one or the other.



◀ **Figure 6:** Kirk Stemmed/ Serrated-like (left) and Basally Notched Eva-Like (right) Points from Southwestern Ontario.

these dry conditions. We have no clear idea why this situation exists although some potential reasons have been reviewed elsewhere (Ellis et al 2009:805).

After about 4400 BC we have much more archaeological evidence of occupation. This increase is in part due to the fact that there are more artifacts other than flaked stone points that are somewhat diagnostic of this era, at least in eastern Ontario where several distinctive ground stone tool forms are

regularly found (Ellis et al. 1990a:90; Lackowicz 1996; Wright 1962), but another obvious reason is the rise in water levels of the Great Lakes.

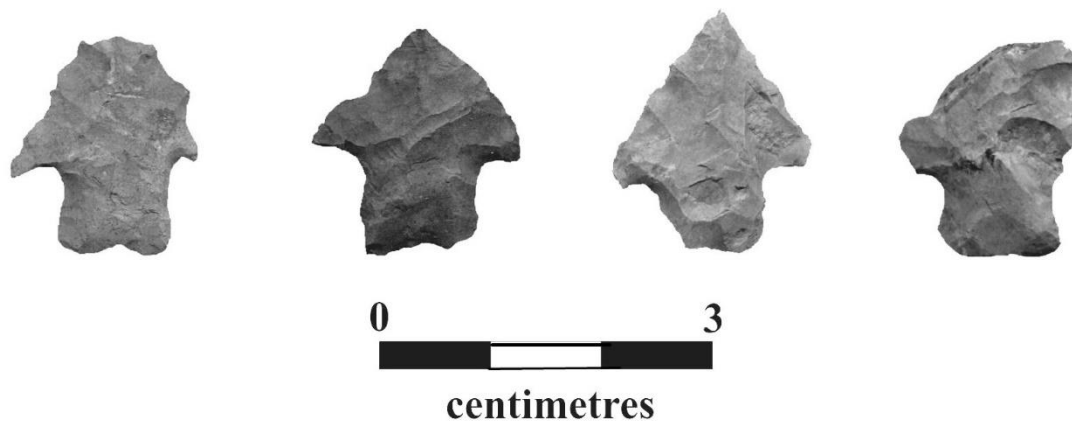
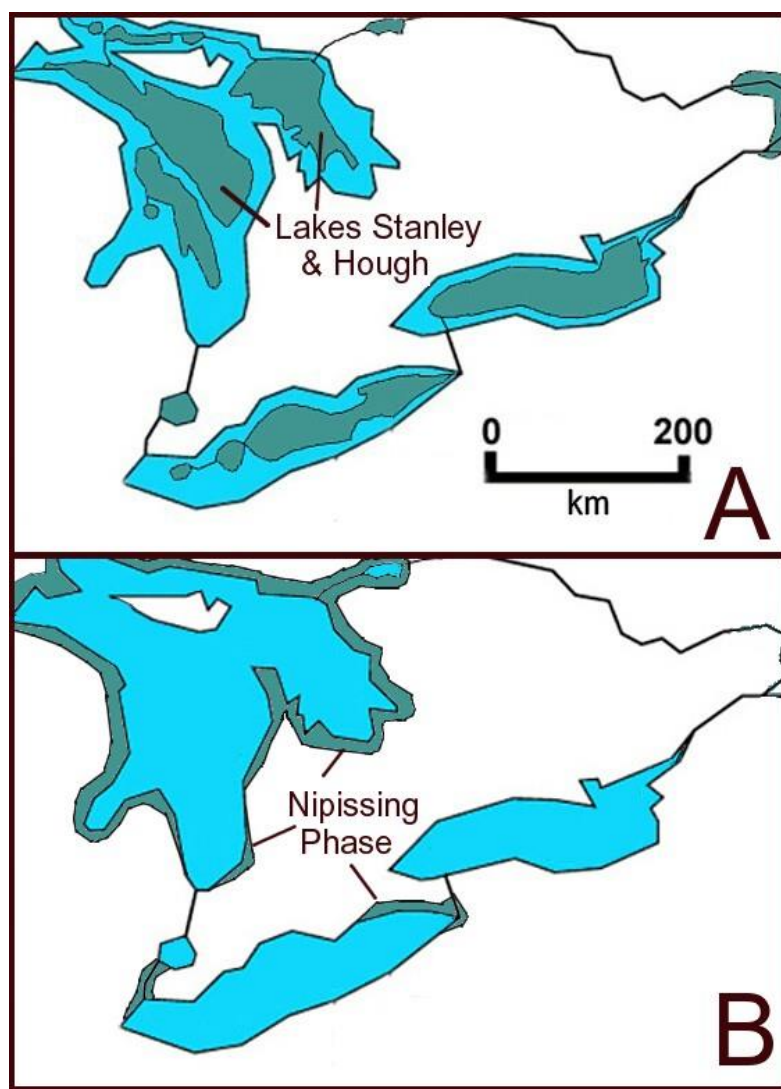


Figure 7: Stanly-Neville Like Points (Heat Damaged) from the Leschuk-Weisz Site (courtesy of Holly Martelle).



◀ **Figure 8:** Changing Levels in the Eastern Great Lakes. A: Lowered Earlier Post-Glacial Lake Levels (ca. 9600-4400 BC); B: Higher Lake Levels at the time of the Nipissing Phase (ca. 4400-2800 BC).

From ca. 4400-2800 BC (5500 to between 4500-4000 RCYBP) water levels rose above modern or higher than they had previously been in some basins, notably the Huron basin, and flooded substantial areas (Figure 8B). This event is called the Nipissing Phase (see Karrow 1980). This water rise forced people who were previously living above and below the elevations of the modern lakeshore levels into smaller areas and of course, made more prime lakeside habitat locations available for archaeological examination (Lovis 2009). The best known Ontario development that corresponds to these elevated

lake levels is the Laurentian Archaic which, based on William Ritchie's (1969:79-83) definition, is found only in eastern Ontario, although flaked stone point styles/types matching the classic Laurentian Otter Creek and Brewerton styles (Ritchie 1971; Figure 9) are much more widespread into southwestern Ontario and beyond (e.g., Ellis and Deller 1986; Ellis et al 2009:809-810; Williamson et al. 1994).

Laurentian point forms stress again the problem of how reliant we are on point styles to assign sites to various time periods and often with samples of only one or two points per site. However, our type characterizations remain largely impressionistic and problematic. As mentioned, not all corner-notched serrated points are Early Archaic. Some are Middle or Late Archaic. Neither are all large, broad, corner-notched points Brewerton, as similar forms occur in the Late Archaic. I could add many other point forms to the list. We really need more detailed, less impressionistic, characterizations and comparisons if we are to understand point variability. Only in this way can we maximize their utility as tellers of time and as measures of assemblage relationships. It is

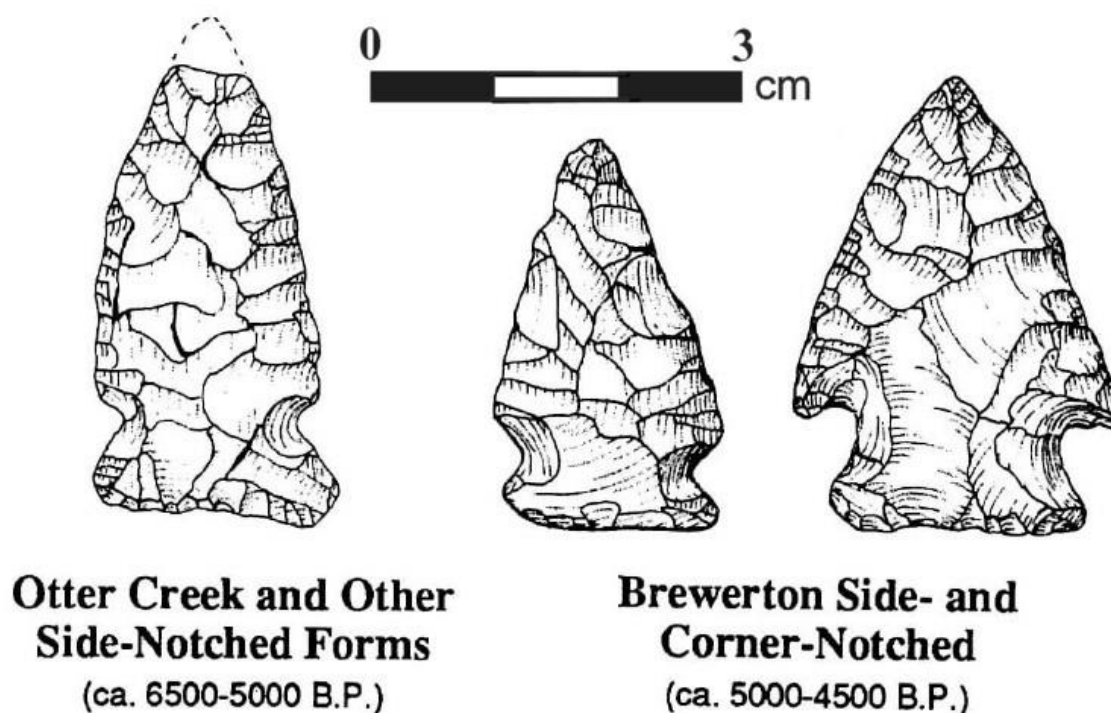


Figure 9: Later Middle Archaic Point Types. Modified from Ellis et al. 1990: Figure 4.3. Drawings by Ian Kenyon.

heartening to me that people are working on this for the Middle Archaic, notably James Conolly (2018) who has done detailed morphometric analyses of Otter Creek and Brewerton forms from the classic Ontario and New York sites to: characterize these types more rigorously, precisely and accurately, recognize more objectively points assigned to these types, and explore the causes of their variability. Among many other things, this work has provided evidence supporting the idea that Brewerton types such as the corner-notched, side-notched and probably other variants actually represent a resharpening/reworking sequence as others had argued (Bursey 2015:7; Ellis and Deller 1986:50) and not distinct stylistic or functional types.

Aside from Conolly's work, and although technically in Quebec and more northerly located, a major event was the publication of detailed final reports on the Laurentian sites of Allumettes Island and Morrison's Island on the Ottawa River near Pembroke, Ontario (Figure 1), investigated by the late Clyde Kennedy in the 1960s (Chapdelaine and Clermont 2006; Clermont and Chapdelaine 1998, 2003; Pilon and Young 2009). I stress three highlights of these analyses:

1) they have provided several more radiocarbon dates on the Vergennes and Brewton phases of Laurentian and confirm a date of ca. 4300-3800 calibrated BC (5500-5000 RCYBP) for Vergennes with diagnostic Otter Creek Points and ca. 3800-3000 calibrated BC (5000-4500 RCYBP) for Brewerton and its associated point types;

2) as suspected for a long time, Laurentian peoples were involved in widespread trade relationships over large area, a good example being the long known abundance of copper artifacts from the western Great Lakes, but there are a considerable number of stone artifacts on exotic materials. Notably >35% of the points at both sites are made on Onondaga chert from the Niagara Peninsula or western New York state, which indicates a highly organized procurement of that chert and its exchange;

3) it has led to questioning of our settlement-subsistence system models for Laurentian. The best known sites are large riverine oriented ones and they have long been interpreted (on minimal data) as warm weather aggregation sites occupied from spring to summer with dispersion into smaller interior sites in fall to winter (Ellis et al. 1990a:92; Ritchie and Funk 1973). Although it may not be typical given its more northern location, Morrison's turns out to be somewhat small and the fauna is dominated by remains of beaver and especially, eels, which can be taken in quantity when they go by the site in the early fall. So Morrison's seems to have been occupied from only late summer to fall, by a small number of people who focused on eels and beaver and preparing/refurbishing hunting equipment, probably as preparation for cold weather activities

Beyond the Ottawa River sites, there have been reports on other smaller sites in southcentral Ontario investigated via CRM work (Figure 1), such as Rentner by Paul Lennox (2000) and most recently Mt. Albert, analyzed by Kyle Forsythe (2016). These sites, despite their northerly locations, both have a considerable amount of Onondaga chert, reinforcing the idea of an extensive exchange network for that material as seen at Morrison's and Allumettes islands. Mt. Albert is notable as well because it consists of a large concentration of lithic material from a very small area. The material recovered almost totally lacked waste from tool manufacture and consisted of a large number of fractured biface preforms and flaked stone tools that had to have been purposefully broken. There are even three bannerstone fragments and these too may have been purposefully smashed. This site certainly suggests ritual behaviours similar to that documented at the Late Paleo Caradoc site (Deller and Ellis 2001; Ellis and Deller 2002) of 7000 years earlier.

Late Archaic

As for the Late Archaic, in ASO we divided it into three kinds of assemblages/complexes, not surprisingly distinguished by different stone point styles: Narrow Point, Broad Point and Small Point (Figure 10; Ellis et al. 1990b:93).⁷ Most definitive Narrowpoints, comparable to Lamoka and other types in adjacent New York State, largely come from the Niagara Peninsula and adjacent areas. While there have been a few reports of ephemeral sites since ASO, such as the Winter site near Guelph (Ramsden 1990), I focus here on the Broad Point and Small Point complexes where most more recent research has been carried out.

⁷ Actually, it was Ian Kenyon and Bill Fox (e.g., Fox and Spence 1986) who suggested and started using such terminology. Narrow Point, Broad Point, etc, is used to refer to the complexes and Narrowpoints, Broadpoints, etc. to the points themselves.

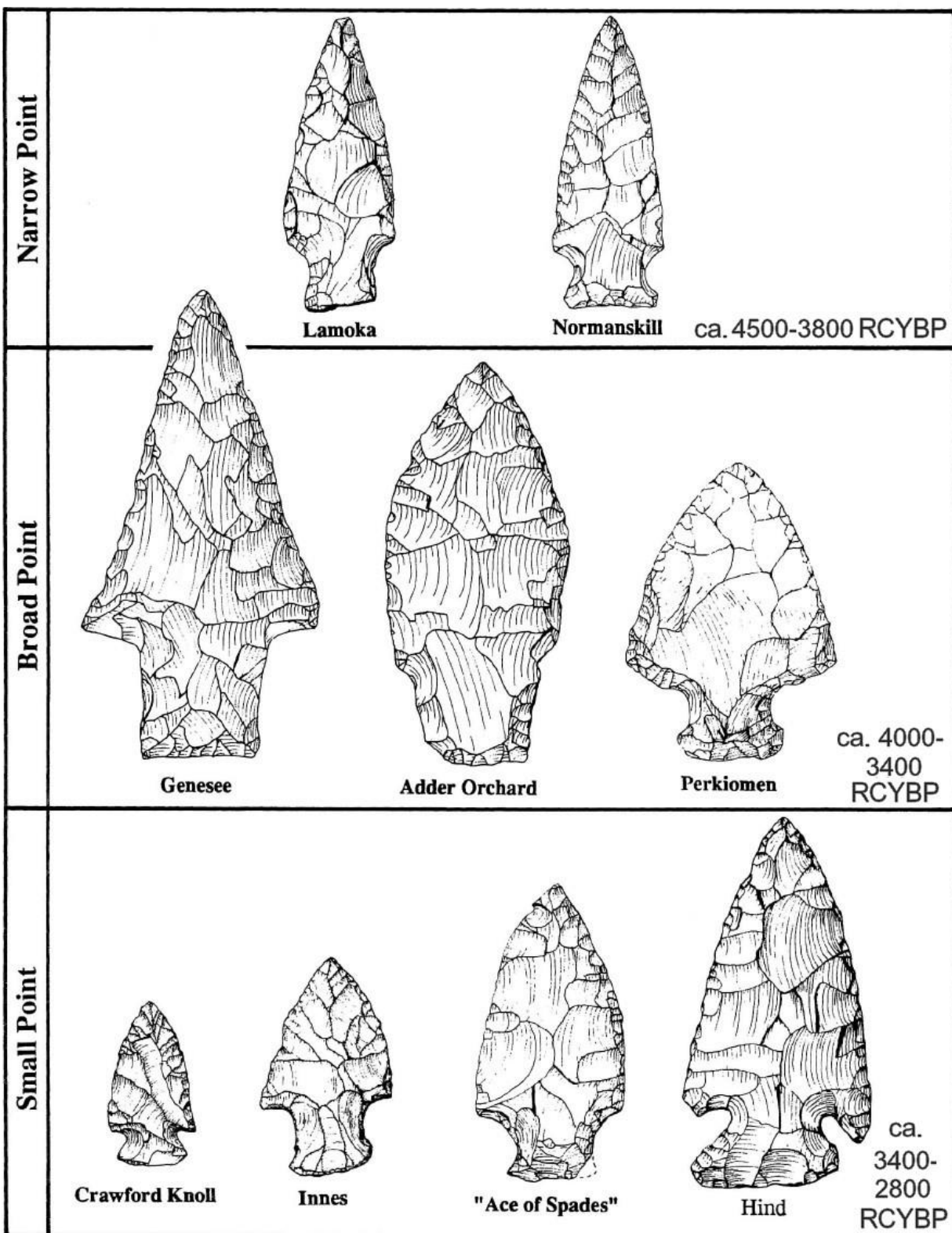


Figure 10: Late Archaic Point Types. Modified from Ellis et al. 1990: Figure 4.18. Drawings by Ian Kenyon.

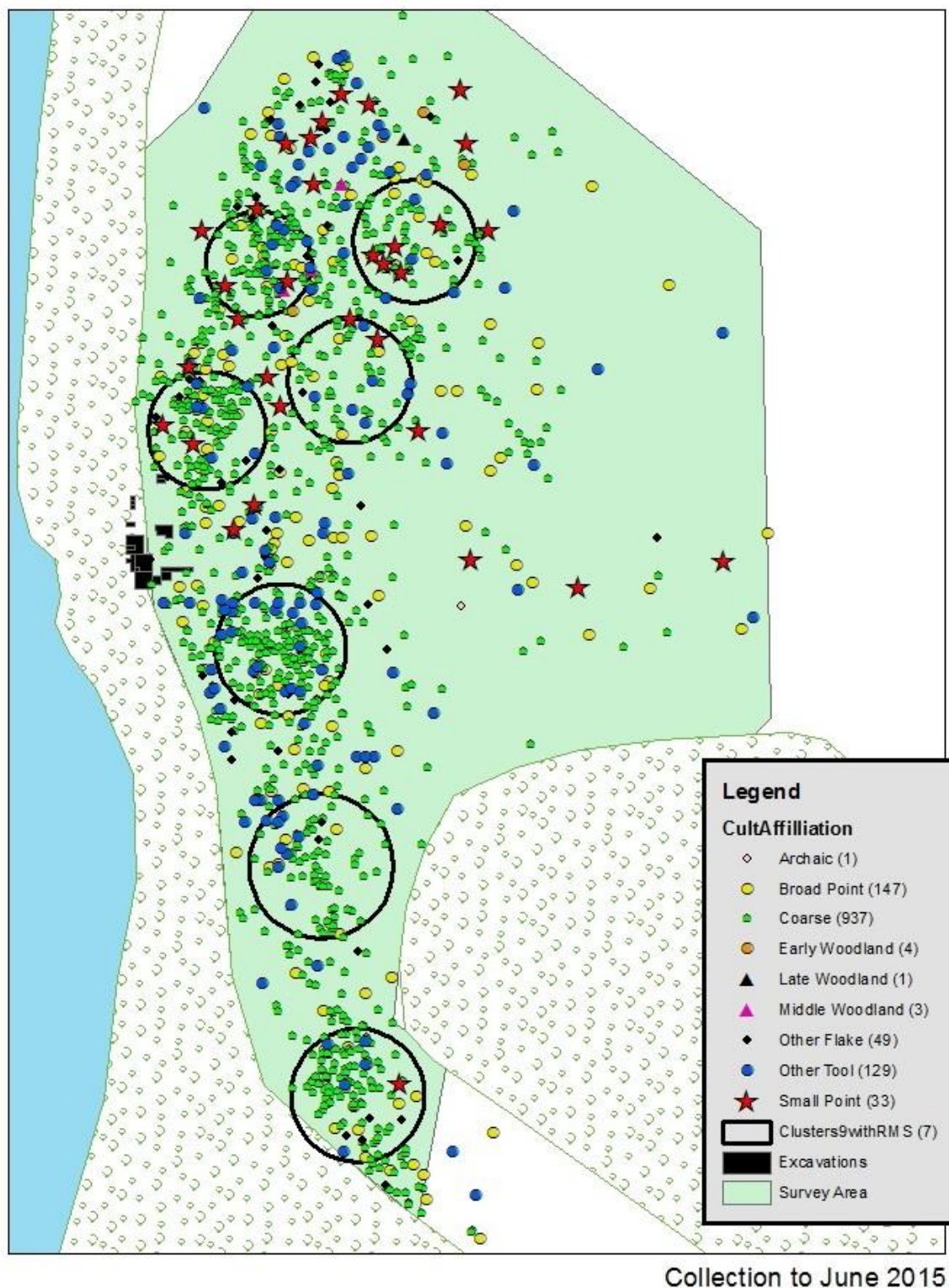


Figure 11: Spatial Surface Clusters (Encircled Areas) of Broad Point Artifacts (Bifaces and Subgreywacke/Coarser Grained Flakes), Davidson Site. Map and analyses by James Keron.

At the outset I stress these assemblages are best known in southwestern to southcentral Ontario and their status in eastern Ontario is not at all as clear as it should be although sites with materials representative of both are most certainly present in those more easterly locales (Ellis et al. 1990b; Ritchie 1949). The Broad Point Archaic includes at least two recognized point types: Adder Orchard and Genesee (Figure 10). The former resemble point forms found to the west southwest into the Michigan, Ohio, Illinois area, whereas the latter resemble forms found to the east-southeast as in New York and Pennsylvania. There is much uncertainty about what these shifting external stylistic connections mean, why such large points were made, and even if they were used as projectile tips or knives. However, Kaitlyn Malleau (2015, 2016) showed experimentally they were exceptionally good as butchering tools but were also very lethal as even hand launched weapons; Ontario examples have consistent damage suggesting projectile usage.

In terms of chronology, while Ian Kenyon believed Genesee points were earlier than the Adder Orchard forms, excavations in the 1990s at the Adder Orchard site itself (Figure 1) by Jacquie Fisher (1997), produced something unheard of at the time for many Archaic sites: four statistically identical conventional radiocarbon dates of around 2500 calibrated BC (4000 RCYBP) that suggest they are actually earlier than Genesee and definitively indicate that the Adder Orchard style items overlap in time with the later part of the Narrow Point Archaic existing more easterly. Dates on comparable points from surrounding areas such as Ohio (e.g., Redmond and Scanlon 2009; Redmond et al. 2016) do indicate some of these points pre-date Genesee. However, they actually may overlap slightly for a time with the earliest Genesee forms given the recently obtained earliest dates for Davidson on nutshell (and that the charcoal dates from the Adder Orchard site itself probably overestimate by 100 or more years the age of those points). Malleau (2015), using a “communities of practice” (Lave and Wenger 1991) theoretical approach actually suggests some contact and interaction between communities using Adder Orchard and Genesee points.

More recent work has focused on excavation of sites with more Genesee-like/related Broad Point components. One is my work at the Davidson site on the Ausable River just north of Adder Orchard, originally investigated by Ian Kenyon (1980a). This work has demonstrated that this site, as well as several others in the Ausable area, are quite large. The Davidson Broad Point component actually covers 1.9 ha, which is very large for a Late Archaic site – as noted earlier, Archaic sites are often stereotyped as small and ephemeral. The site actually consists of several statistically isolated clusters of material that are relatively evenly spaced and of about the same size and composition as demonstrated by Jim Keron (2015; see Figure 11). One possible explanation is that the site was an aggregation site where normally dispersed populations came together and during the warmer months based on the faunal and floral recoveries (Ellis et al. 2014b).

Use of the site based on more recent AMS dates and one date obtained in the 1970s by Ian Kenyon (Figure 2) indicates an intensive period of use in the small area we excavated (86 m²)⁸ around ca.

⁸ Beyond Kenyon's (1980a) conventional date, one AMS date came from outside the main excavation blocks, This date on charcoal, the only datable material recovered from a subsoil feature in a Broad Point surface cluster located

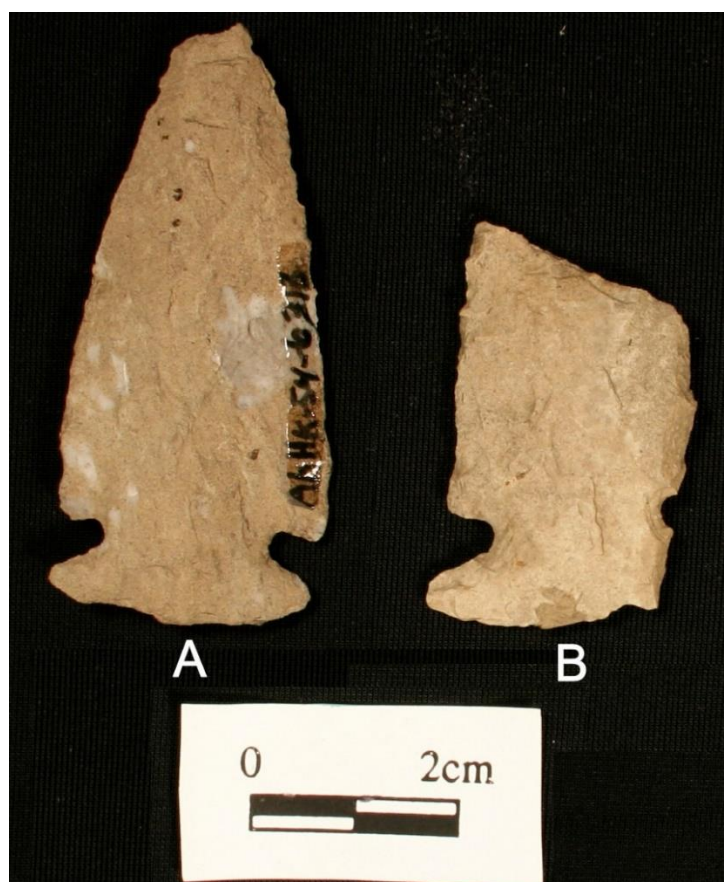
2400-2200 BC (3800-3600 RCYBP). However there is a lesser cluster of three dates on features in one small site area that included some actual Broadpoints and preforms and may indicate they was used as late as ca. 1800-1700 BC or 3400 RCYBP. Yet, all of these dates were run on charcoal and it could be these are just dates on old wood associated with the later Small Point component - other dates on nutshell are more consistent with that component. Whatever the case, there are several definitive Broad Point features including a hearth, a metre deep storage pit, several small basin-shaped pits, and of interest, at least one true midden or garbage dump. The latter indicates quite organized refuse disposal and suggest much more than ephemeral stays; this is the oldest *true* midden I know of from southwestern Ontario. A dog burial was reported earlier from the site that Kenyon (1980a) associated with the Broadpoint occupation. Isotopic analyses suggest that human fed/associated animal was ingesting lots of fish versus wild wolf counterparts (Morris 2015:69).

Another very important site is Peace Bridge at Fort Erie investigated as long ago as the 1960s but most intensively through CRM work by Archaeological Services Inc. since the 1990s (Williamson et al. 2006; Williamson and MacDonald 1997, 1998). The Broad Point component has two dates of around ca. 1700 BC or 3400 RCYBP, suggesting the site was used later in the Genesee period or it could be simply the problem stressed earlier of obtaining refined dating on these multi-component sites. Among other things, Peace Bridge is on top of an outcrop of Onondaga chert that was being actively mined and of course, debris from making Genesee (and other later point forms) is common; there were also many complex features at this site including a dog burial but as the site was used long after Broad Point times it is hard to associate those features with that component.

Although perhaps not specifically associated with Broad Point, a major eastern Ontario discovery of recent times of comparable age is James Conolly's work in collaboration with the Curve Lake Anishinabek First Nation at Jacob Island in the Trent System (Figure 1). This work has documented several discrete Archaic age burial groups consisting of single pits in which as many as 24 in flesh and bundle burials were interred, with four of these features dated to ca. 4200-3800 RCYBP and one to a later Archaic age feature at ca. 3200 RCYBP (Conolly 2015; Conolly et al. 2014). These are clearly discrete "areas set aside solely for the burial of band members and used repeatedly over the years" and as such represent in anthropological definitions the oldest known "true" cemeteries in southern Ontario. It used to be thought these first appeared with the later Small Point associated Glacial Kame cemeteries (e.g. Ellis et al. 1990a:115-119; Spence 1986; Spence and Fox 1986) but Jacob Island indicates that is not the case and, among other things, their presence suggest greater territoriality amongst Late Archaic age peoples. Dog remains, including a deliberate burial, are especially common at Jacob Island (Csenkey 2014) reinforcing the ritual significance of this species suggested by the dog burials at other sites. Comparable to the Davidson data, the reported isotopic values suggest fish were important in their diet versus wolf remains and by extension, were important in the diet of the Archaic people using the site (Morris 2015:80).

in the Broad Point surface cluster just to the southeast of the excavated area. That feature's presence was suggested by a gradiometer anomaly and was exposed in the resulting test excavations (see Ellis et al. 2016).

In the Small Point (or Terminal) Archaic, there are several named point types (Figure 10; Kenyon 1989) but there is still little clarity on what these mean if one relies solely on the rare radiocarbon dates on specific forms. Nonetheless, a temporal sequence is strongly suggested for certain types. One type, Crawford Knoll, resembles a range of small notched forms found in the central to western Great Lakes vicinity such as the Preston Notched points of Wisconsin. Notably, at the Preston, Knoop and Durst Rockshelters in that State, the stratigraphic evidence indicates these forms predate points of the Durst stemmed type (Pleger and Stoltman 2009:713-714). The Durst points closely resemble what have been called Innes points in Ontario (Ellis et al. 2009:819; see also Lovis and Robertson 1989:235). So that evidence suggests Crawford Knoll is the earliest form followed by Innes. In addition, Hind points, seem to date the latest and post-Innes given their very close resemblance to subsequent Early Woodland Meadowood points and their associated tool kits (Spence and Fox 1986). Indeed, some more refined and presumed later dating Hind type points seem identical to side-notched Meadowood points except they are more corner to diagonally notched and the two can be easily confused (Figure 12). For that matter, what are apparently earlier dating, less refined Hind forms, such as those from the Welke-Tonkonoh site (Muller 1989), easily could be confused with smaller versions of earlier Brewerton corner-notched points. We need detailed studies of these points such as James Conolly has done for the earlier Middle Archaic point forms. Regardless, what should be clear is that in contrast to the earlier Genesee Broadpoints, which stylistically are like assemblages to the east, the Smallpoint styles indicate clear stylistic ties



◀ **Figure 12:** Examples of Apparently Later Dating Hind Points, Davidson Site. These points are virtually identical to Meadowood forms except for the diagonally to corner oriented, slightly deeper notches.

in the opposite direction. Also, if the many radiocarbon dates from the Davidson site are typical, they suggest there could be a temporal gap between the two Late Archaic developments and perhaps some degree of discontinuity. More work is definitely needed to try and further document and explain these apparent patterns.

In any case, most of these point forms are small, and especially in contrast to earlier Broadpoints leading Ian Kenyon (1980b) to suggest some may have

tipped arrows rather than spearthrowers. Kristen Snarey (2000; Snarey and Ellis 2010) attempted to evaluate this ideas using formulae developed from documented ethnographic examples of each weapon and many examples, notably Crawford Knoll, which can be exceptionally tiny, are classified largely as arrow tips using these formulae.

Some Small Point sites mentioned in ASO have been more published since that article was written, including Crawford Knoll (Kenyon and Snarey 2002; Thomas 1988). Also, we have more detailed reports/documentation of known associated Glacial Kame burial sites by Stan Wortner and the late Bill Donaldson, some of which were discovered as far back as the mid-1800s (Donaldson and Wortner 1995). But there have also been many new occupation sites documented since ASO and notably in southwestern Ontario. These sites seem to be the most commonly reported Archaic ones in CRM work. I cannot possibly cover all of these here, most of which are relatively small (see Ellis et al. 2009:821-824), so I will focus on what I think are some important examples and insights.

One important work was Phil Woodley's excavations at the Thistle Hill site near Brantford, a site which has largely yielded Innes type points (Woodley 1990). A major discovery here was two small family size pit houses with interior hearths. These certainly seems to be amongst earliest documented houses in southern Ontario, if not the whole Great Lakes area.

Comparable to the work at Thistle Hill, my work at Davidson also uncovered housing dating to Small Point times. The Small Point occupation concentrates in an area about 4000 m² at the northwest site end, apparently lining the course of the river at the time. The concentrated area of diagnostic items (stars on Figure 11) also corresponds to a dense band of magnetic anomalies revealed in gradiometer and magnetic susceptibility studies (Eastaugh et al. 2013; Ellis et al. 2014a, 2014b). Excavation in a small area at the south end of that dense band shows these anomalies are all cultural features. Most are Small Point Archaic in age. Aside from medium to small-sized shallow pits and a midden filling a natural erosional channel, there are four houses documented too, including three pit houses (Ellis et al. 2015). The gradiometer survey revealed many large anomalies suggesting a considerable number of such houses are present at the site.

The most spectacular pit house (Figure 13) is one alluded to earlier. It had a round body about 5 m across and one metre deep, with a sloping a sloping entrance extension on the west side facing the river. Inside there was a bench cut into the sloping walls and apparently a divide north to south across the middle formed by a bark-covered partition. The roof was a sloping one laid on top of four diagonal rafter posts. These post ran from each corner to the higher center of the roof. Aside from a sloping rather than a central roof entrance, and being of a smaller size, this house closely resembles some ethnographic ones reported elsewhere (e.g., Lepofsky et al. 2009: Figure 4). Pit houses with their insulating qualities are clearly winter houses and their substantial nature suggests very stable winter settlements at this time. Another structure was a small oval surface house outlined by a narrow trench dug to insert wall posts, and had two centrally located interior support posts holding up the roof (Figure 14; Ellis et al. 2015:44). This house is well dated by three consistent AMS dates on nutshell in the wall trench to ca. 1200 BC (3000 RCYBP). A comparable

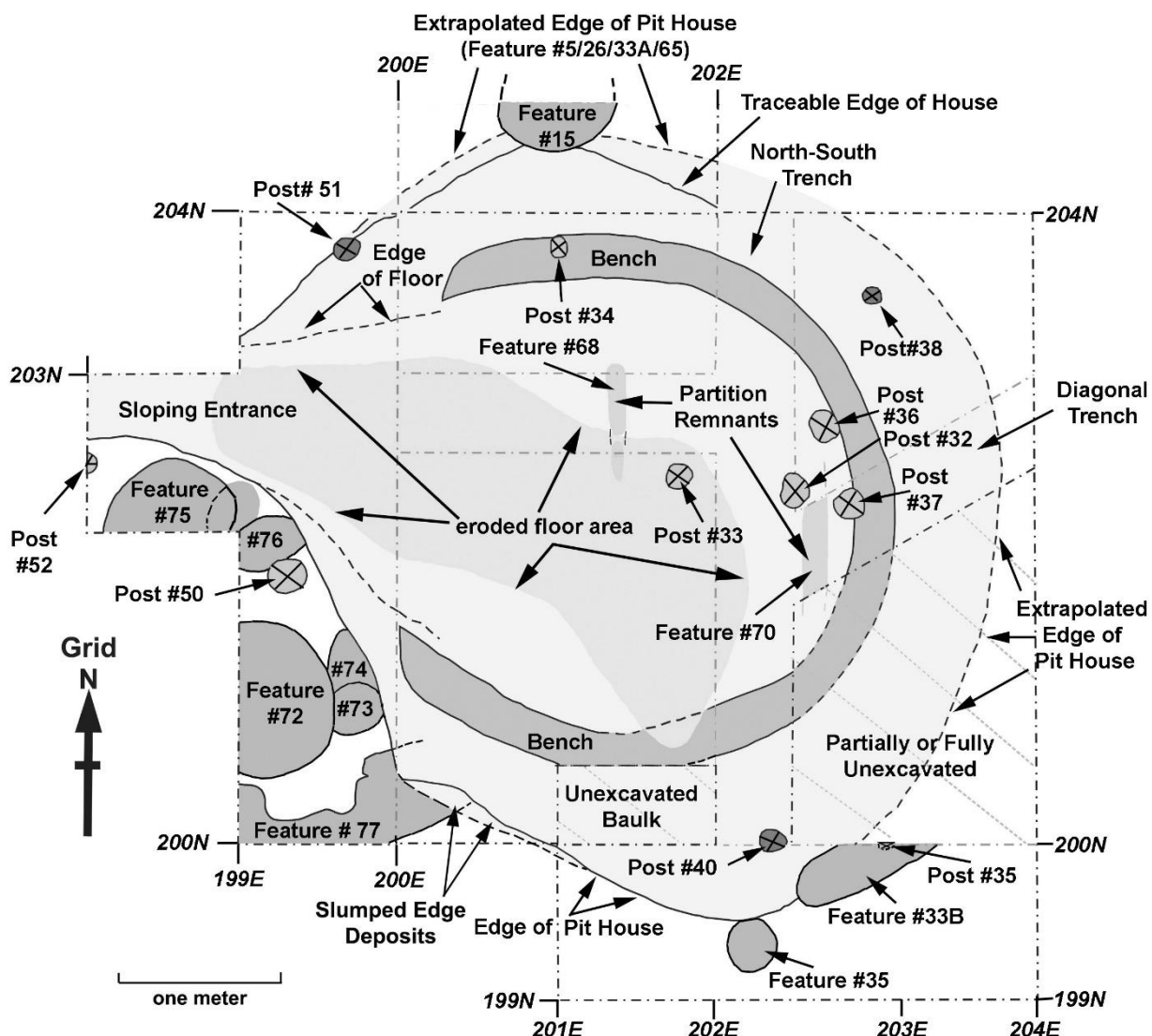


Figure 13: Large Pit House, Davidson Site. Note where house has cut through earlier features as at the southwest corner where Broad Point Features such as #73 (a hearth) and #77 (a refuse filled erosional channel/midden) have been impacted.

but earlier dating Late Archaic structure is reported from a Michigan site (Garland et al. 1990: Figure 42) and what appear to be similar structures are reported from the subsequent Early Woodland Meadowood Phase Beaverbrook site in London (see Wood 2015:60).

Dense features are also seen at Peace Bridge although some of these are of Broad Point age and some post-Archaic rather than of Small Point age. Many insights have been obtained from work at this site but I confine myself to noting that the excavators recognized several larger complex features that they called living floors and thought they might be house floors too (Williamson and MacDonald 1997). I am uncertain what these are, but they can be easily described as larger organic

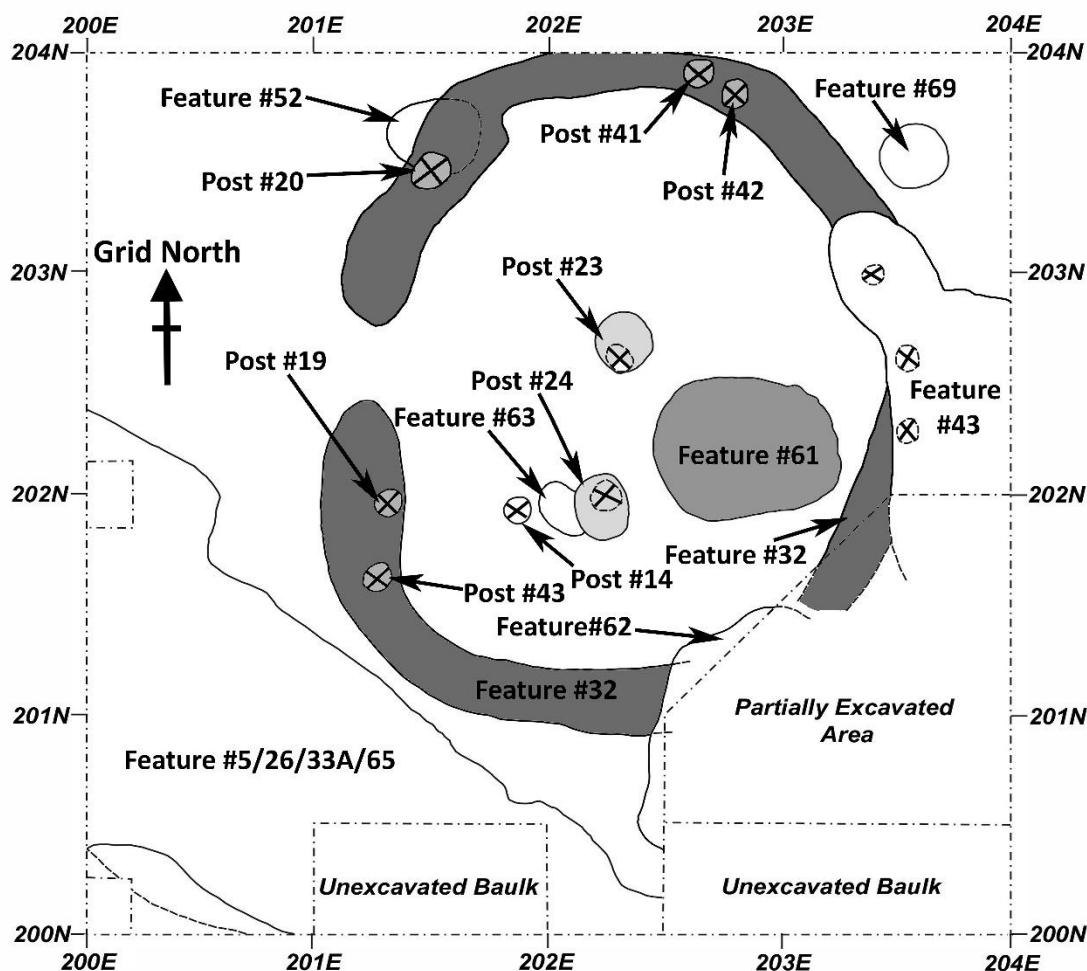


Figure 14: Wall trench House (Feature #32) Davidson Site. House was actually built on the fill on top of the pit house shown on Figure 13. The entrance to what appears to be another pit house (Feature #43 at right) overlaps and cuts through the wall trench house.

stains filled with pits and such have been reported from the earlier McIntyre Archaic site in eastern Ontario (Johnston 1984: Figure 32), as well as at several other Michigan (e.g., Robertson et al. 1999:107) and Ontario Archaic sites including even Davidson. I do believe it is possible these are actually earth ovens dug down over and over again in the same location. They are associated with areas of dense amounts of fire-cracked rock at Davidson, sometimes clustered in the pits themselves, and a few are definitely associated with fire-reddened soil. One such Feature cluster, #22, 22A, 22B, 64+ (see Figure 3: stippled feature cluster at right centre), actually has some peripheral posts suggesting it may have been in some sort of lean-to structure. One could interpret the larger shallow organic stains surrounding the cluster of pits within it (e.g., Figure 15: Feature



Figure 15: Profile View along Central to Southeast Corner Wall (204E Grid Line) of Block Unit A, Davidson Site. Note shallow Feature #22A into which larger pits are situated or were placed (22B and 22D).

#22A) as the borrow pits created by digging and refilling such ovens over and over and scraping up surrounding dirt to insulate them during use (see Black and Thoms 2014:218).

A final example of more recent research on Small Point assemblages is Pearce's (2008) analysis of lithic source use profiles from the Green Hill (Pearce and Ellis 2008) and several other southwestern Ontario sites. She showed that on sites near the Kettle Point source points and sometimes preforms on Onondaga were quite common, whereas at sites near the Onondaga source Kettle Point items of any kind were rare to non-existent. In sum, Onondaga was seemingly moving one way as these bifaces suggesting widespread exchange in bifaces and points on that material - a continuation of the widespread distribution of Onondaga bifaces seen in earlier times back to the Middle Archaic Laurentian. This contradicted the earlier suggestion of Ellis and Spence (1997) that the movement of Onondaga in the Small Point Archaic was a product of settlement mobility or groups moving back and forth between the source areas of Kettle Point and Onondaga.

Conclusions

There have been some important Archaic discoveries, and of course resulting insights, from the almost 30 years since the ASO chapter was written. However, for a pre-contact era that lasted such a long time, our substantive knowledge has not expanded as much as I would like. Moreover, the continuing lack of interest in at least academic archaeological circles for this era is hard to fathom, given the potential theoretical insights that are increasingly being demonstrated in Archaic studies outside the province (e.g., Moore and Smith 2017; Sassaman 2010; Thomas and Sanger 2010). I

do hope, however, that the more recent work at some sites investigated, not just by academics but also by CRM practitioners, such as at Jacob Island, Davidson and Peace Bridge, has opened our eyes to the potential to refine our chronologies (or at least show how our earlier chronologies were oversimplified), make important substantive discoveries about past human lives, and explore the theoretical implications of these sites for documenting and understanding these ancient peoples.

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